

CLAIMS

1. Impact attenuator (1) for a vehicle (6) comprising a rear part (2), with a first wheel (22), arranged to an attenuating part (3), a front part (4), with a second wheel (41), arranged between the attenuating part (3) and a coupling part (5) for connection to the vehicle (6), wherein the coupling part (5) comprises a damper (51) for dampening a part of the force during a collision against the impact attenuator (1) and for connecting the impact attenuator (1) laterally movable relative to the vehicle (6) during operation.
2. Impact attenuator according to claim 1, wherein the damper (51) dampens up to a pre-determined pressure against the damper (51) after which the attenuating part (3) absorbs the rest of the collision forces.
3. Impact attenuator according to claim 2, wherein the damper (51) collapses when the pre-determined pressure is reached.
4. Impact attenuator according to any of the claims 2-3, wherein the damper (51) comprises a medium, which is evacuated at the pre-determined pressure.
5. Impact attenuator according to claim 4, wherein the damper (51) comprises an air-damper with a pressure device (52) for evacuating the air.
6. Impact attenuator according to claim 5, wherein the pressure device (52) comprises a safety valve or a bursting disc.
7. Impact attenuator according to claim 4, wherein the damper (51) comprises a hydraulic damper with a hydraulic accumulator.
8. Impact attenuator according to any of the claims 2-7, wherein a beam (53) transfers a part of the collision forces to the vehicle (6) after that the damper (51) collapses.
9. Impact attenuator according to claim 8, wherein two beams (53) are arranged on each side of the damper (51).

10. Impact attenuator according to claim 9, wherein the beams (53) are arranged to transfer the forces of collision to the vehicle (6) through a towing beam (62) on which the towing device (61) is arranged.
- 5 11. Impact attenuator according to any of the claims above, wherein the rear part (2) comprises two wheels (22) and that the front part (4) comprises two pivot wheels (41).
- 10 12. Impact attenuator according to any of the claims above, wherein the damper comprises a mechanical spring system.
13. Impact attenuator according to claim 19, wherein the beams (53) are arranged to the front part (4).
- 15 14. Method for driving an impact attenuator (1) for a vehicle (6) comprising a rear part (2), with a first wheel (22), an attenuating part (3), a front part (4), with a second wheel (41) and a coupling part (5) for connection to the vehicle (6), wherein the impact attenuator is connected flexible length wise to the vehicle and movable sideways to the vehicle during operation.
- 20 15. Method according to claim 14, wherein the connection is through a towing bar comprising a damper (51).